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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,184	04/02/2004	David L. Linam	AG10031083-1	2153

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EXAMINER

LAM, TUAN THIEU

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/817,184

Applicant(s)

LINAM ET AL.



Examiner

Tuan T. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This is a response to the amendment filed 10/13/2005. Claims 9-16 are pending and are under examination.

### **AFFIDAVITS UNDER 37 C.F.R. 1.131**

1. The affidavits filed on 10/7/2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Chalasani (USP 6,864,732) reference.
2. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Chalasani reference.

The Exhibits A and B submitted on 10/7/2005 do not show the date the invention conceived prior art to November 18, 2002.

The figure shown in Exhibit A is not legible. Therefore, it can not be determined if the figure shown in the Exhibit A and the claimed invention are alike.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Mokovic et al. (US 2003/0107421).

Figure 1 of shows a circuit comprising an input conveying input signal (80), a first pass

gate (20), a first master clock (CN), a first storage node (output of transistor 20), a second pass gate (30), a slave clock (CP), a first inverter (120), a third pass gate (bottom transistor of passing gate 30), a second storage node (output of the transistor 30) as called for in claims 9 and 15.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 10-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mokovic et al.(US 2003/0107421).

Figure 1 of Mokovic et al. shows all the limitations of claims 9 and 15 as noted above except for a third inverter coupled to the second storage node, the third inverter generating a compliment output signal as called for in claims 10 and 16. As noted in figure 1 of Mokovic et al., the master and slave latch provides a single output signal by an inverter connected to an input of the inverter 50. Such a single output master and slave latch can be easily converted to a differential master and slave latch. One of common way of doing so is to couple an extra inverter at the output of the inverter 50 of Mokovic et al. Depending on application, a differential output signals can be provided. Therefore, outside of an non-obvious results, the obviousness of using an extra inverter to provide a complement output signal in a master and slave latch will not be patentable under 35USC 103(a).

Regarding claim 11, figure 1 of Mokovic et al. shows a fourth and fifth inverters (upper and lower inverters of the latch 40, respectively).

Regarding claim 12, figure 1 of Mokovic et al. shows sixth and seventh inverters (upper and lower inverters of the latch 50, respectively) but does not disclose the sixth inverter is weaker than the fourth inverter. However, it is known to have the upper inverter of the master stage bigger than the upper inverter of the slave stage in order to overcome the signal of the subsequent stage (slave stage) in order to prevent erroneous operation. Therefore, outside of an non-obvious results, the obviousness of having inverter of different size will not be patentable under 35USC 103(a).

Regarding claim 13, figure 1 of Mokovic et al. shows fourth and fifth inverters (upper and lower inverter of the latch 50).

Regarding claim 14, figure 1 of Mokovic et al. shows fourth and fifth inverters (upper and lower inverter of the latch 50).but does not disclose the fourth inverter is weaker than the first inverter (120). However, it is known to have the input inverter (120) bigger than the inverter of a latch within the master and slave register in order to overcome the signal within the latch in order to prevent erroneous operation. Therefore, outside of an non-obvious results, the obviousness of having inverter of different size will not be patentable under 35USC 103(a).

### ***Response to Arguments***

2. Applicant's arguments filed 10/7/2005 have been fully considered but they are not persuasive.

Regarding the Markovic et al. (US 2003/0107421), applicant argues that Markovic does

not show “a second pass gate connected to the first storage node and enabling a second signal in response to the first signal stored in the first storage node and in response to a slave clock signal wherein the slave clock is a compliment to the mast clock signal” as required in claim 9 is not persuasive. As seen from figure 1, the second pass gate 30 is connected to the first storage node (output of the transistor 20) via the inverter 40 and enabling a second signal (output of the pass gate 30) in response to the first signal stored in the first storage node. The second pass gate is also responsive to the slave clock CP which is compliment of the master clock CN. Therefore, the limitations of claim 9 are fully met. The rejection is deemed proper.

Claims 10-14 are dependent of claim 9 remain rejected under 35USC 103(a) as being unpatentable over Markovic et al. for the reasons noted above.

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P. CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan T. Lam  
Primary Examiner  
Art Unit 2816

11/11/2005